

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT

PATENT COOPERATION TREATY

(Chapter II of the Patent Cooperation Treaty)

Applicant's or agent's file reference RL 602 WO	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2004/013353	International filing date (day/month/year) 25.11.2004	Priority date (day/month/year) 11.12.2003
International Patent Classification (IPC) or national classification and IPC F16L25/00, F16L37/12, F16L37/133, F16L37/138, F16L33/22		
Applicant A. RAYMOND & CIE et al.		

1. This report is the international preliminary examination report, established by the International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
- ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers to contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in Item 4 of Box No. 1 and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:
- | | |
|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input checked="" type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

Date of submission of the demand 05.10.2005	Date of completion of this report 27.02.2006
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Box No. I. Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise stated in this section.
 - ☐ The report is based on a translation from the original language into the following language, _____, which is the language of the translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3 and 23.1b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets that have been furnished to the receiving office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed hereto)*:

Description, pages

1-7 _____ as originally filed

Claims, No.

1-6 _____ received by fax on October 5, 2005

Drawings, Sheets

1/3-3/3 _____ as originally filed

- ☐ a sequence listing and/or any related tables – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
 - ☐ description, pages
 - ☐ claims: Nos.
 - ☐ drawings: sheet/fig.
 - ☐ sequence listing (*specify*):
 - ☐ any tables related to the sequence listing (*specify*):
 4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since in the opinion of the authority they go beyond the disclosure as filed, for the reasons stated in the Supplemental Box (Rule 70.2 c)).
 - ☐ description, pages
 - ☐ claims: Nos.
 - ☐ drawings: sheet/fig.
 - ☐ sequence listing (*specify*):
 - ☐ any tables related to the sequence listing (*specify*):

**If Item 4 applies, some or all of those sheets may be marked "superseded."*

Box No. V. Reasoned statement under Article 35(2) as to novelty, inventive step and industrial applicability; citations and explanations in support of said statement

1. Statement
- | | | |
|-------------------------------|------|------------|
| Novelty (N) | Yes: | Claims 1-6 |
| | No: | Claims |
| Inventive step (S) | Yes: | Claims 1-6 |
| | No: | Claims |
| Industrial applicability (IA) | Yes: | Claims 1-6 |
| | No: | Claims |

2. Citations and explanations

See supplemental sheet

Box No. VII. Certain defects in the international application

The international application was found to contain the following defects in form or content:

See supplemental sheet

Re Item I

Basis of the report

The preamble of amended Claim 1 is composed of original Claims 1, 5 and 6, the characterizing part being based on page 5, line 31 to page 6, line 3. Claims 2 and 3 are based respectively on page 5, line 33 to page 6, line 1 and on page 6, lines 5 and 6.

Original Claims 4-6 correspond to original Claims 2-4.

The requirements of Art. 34(2)(b) PCT are therefore met.

Re Item V

**Reasoned statement as to novelty, inventive step and industrial applicability;
citations and explanations in support of said statement**

Document DE-A-101 58 114 (see in particular Figs. 3, 4, 6 and 7 and the relevant description) discloses a device according to the preamble of Claim 1, the sole independent claim.

The characterizing features achieve the technical object of simplifying the handling of such a device and nevertheless establishing a particularly stable connection.

Although Document WO-A-01/20216, in Fig. 12 and the description of that figure on pages 20 and 21, indicates a similar device in which the sliding bushing (90) can be slid into an arresting depression (88) provided in the clamping bracket (86) in the region of the engaging noses (87), this known sliding bushing cannot be slid out of a releasing depression.

That feature enables the sliding bushing to be connected to the rest of the device in a permanently secure fashion.

The sliding bushing of DE-A-101 58 114, on the other hand, can be slid out of such a releasing depression (between projections 29 and 30). Nevertheless, these two documents could not be combined to arrive at the subject matter defined in Claim 1 without an inventive step. If the clamping brackets 86 of the WO document were provided with a front-side groove as a "releasing depression," coupling elements 91 of

sliding bushing 90 would press the engaging noses inward such that the corrugated pipe could no longer be inserted. This position would therefore not be a releasing position, the depression would not be a true releasing depression, and the claimed combination would not lead to the subject matter of Claim 1.

The subject matter of Claim 1 is therefore based on an inventive step under Art. 33(3) PCT.

Claims 2-6 depend from Claim 1 and therefore also meet the requirements of the PCT with respect to novelty and inventive step.

The industrial applicability of the claimed subject matter is stated in the description, in accordance with Art. 33(4) PCT.

Re Item VII

Certain defects in the international application

Contrary to the requirements of Rule 5.1 a) ii) PCT, neither Document DE-A-101 58 114 nor the relevant prior art disclosed therein is cited in the description.

The description has not been adapted to the amended claims (Art. 6 PCT and Rule 5.1 a) iii) PCT.

PATENT CLAIMS

1. A device for connection to an end of a corrugated pipe (18), comprising an infitting section (9) that can be inserted into the end of said corrugated pipe (18) and has at least one conical section (11, 12, 19) provided with a ramp surface (13) that slopes upward in an insertion direction pointing away from an infitting end (8), and comprising a clamping arrangement spaced radially apart from said infitting section (9), said clamping arrangement being configured via at least two resilient clamping brackets (6, 7) that are disposed opposite each other and are oriented parallel to said infitting section (9), and on a free end of each of which is configured an engaging nose (15) that can be fitted in between two elevations of said corrugated pipe (18), and via an axially displaceable sliding bushing (21) that can be moved from a release position into a locking position that prevents the free ends of said clamping brackets (6, 7) from moving radially outward, **characterized in that** said sliding bushing (21) can be displaced axially, said clamping brackets (6, 7) simultaneously deflecting radially, out of a releasing depression (22) and into an arresting depression (24) provided in said clamping brackets (6, 7) in the region of said engaging noses (15).

2. The device as in claim 1, characterized in that said sliding bushing (21) can be displaced into said arresting depression (24) over a slipping surface (23) that slopes upward shallowly in the direction of said infitting end (8).

3. The device as in claim 1 or claim 2, characterized in that said arresting depression (24) is provided with substantially radially oriented boundary sides.

4. The device as in one of claims 1 to 3, characterized in that a retaining surface (14) facing away from said infitting end (8) is present and is set at a steeper angle than said ramp surface (13).
5. The device as in one of claims 1 to 4, characterized in that said infitting section (9) comprises two conical sections (11, 12) and two retaining surfaces (14).
6. The device as in one of claims 1 to 5, characterized in that said infitting section (9) is surrounded at least sectionally by an elastic sealing compound (20).

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AMENDED SHEET